



## Development and implementation of coral reef biocriteria in U.S. jurisdictions

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### Abstract:

Coral reefs worldwide are declining at an alarming rate and are under continuous threat from both natural and anthropogenic environmental stressors. Warmer sea temperatures attributed to global climate change and numerous human activities at local scales place these valuable ecosystems at risk. Reefs provide numerous services, including shoreline protection, fishing, tourism and biological diversity, which are lost through physical damage, overfishing, and pollution. Pollution can be controlled under provisions of the Clean Water Act, but these options have not been fully employed to protect coral reefs. No U.S. jurisdiction has implemented coral reef biocriteria, which are narrative or quantitative water quality standards based on the condition of a biological resource or assemblage. The President's Ocean Action Plan directs the U.S. Environmental Protection Agency (EPA) to develop biological assessment methods and biological criteria for evaluating and maintaining the health of coral reef ecosystems. EPA has formed the Coral Reef Biocriteria Working Group (CRBWG) to foster development of coral reef biocriteria through focused research, evaluation and communication among Agency partners and U.S. jurisdictions. Ongoing CRBWG activities include development and evaluation of a rapid bioassessment protocol for application in biocriteria programs; development of a survey design and monitoring strategy for the U.S. Virgin Islands; comprehensive reviews of biocriteria approaches proposed by states and territories; and assembly of data from a variety of monitoring programs for additional metrics. Guidance documents are being prepared to assist U.S. jurisdictions in reaching protective and defensible biocriteria.

**Source:** <http://dx.doi.org/10.1007/s10661-008-0670-2>

### Resource Description

#### Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;  
 surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience:

audience to whom the resource is directed

Policymaker

#### Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other

# Climate Change and Human Health Literature Portal

elements of climate change to prevent harm to health

A focus of content

## **Exposure :**

weather or climate related pathway by which climate change affects health

Ecosystem Changes

## **Geographic Feature:**

resource focuses on specific type of geography

Ocean/Coastal

## **Geographic Location:**

resource focuses on specific location

United States

## **Health Impact:**

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

## **Intervention:**

strategy to prepare for or reduce the impact of climate change on health

A focus of content

## **Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

## **Resource Type:**

format or standard characteristic of resource

Policy/Opinion

## **Timescale:**

time period studied

Time Scale Unspecified